

JEFFREY C. MORRELL, P.E.

Principal Engineer

civil and environmental engineering environmental management systems soil and groundwater investigation & remediation

Mr. Morrell has over 25 years of diverse professional experience including senior-level management, environmental consulting, and project management. Mr. Morrell worked for eight years in high-technology industries directing environmental projects and managing manufacturing and chemical processes. He has supervised technical professionals in both the consulting and electronics industries. He has managed numerous environmental projects involving engineering and design, construction, operations and maintenance, and regulatory compliance.

At LFR Levine Fricke, Mr. Morrell has managed the Honolulu Office since it was founded in 1992. He has directed a wide variety of environmental projects in Hawaii and the Pacific. His areas of technical expertise include design of environmental management systems, management of hazardous materials and wastes, soil and groundwater investigation and remediation, and potable water and wastewater treatment. Mr. Morrell has extensive experience working with U.S. EPA Region IX and the Hawaii Department of Health.

EDUCATION

Stanford University, Palo Alto, California: M.S. Environmental Engineering, 1983 Pennsylvania State University, University Park: B.S. Civil Engineering, 1981

REPRESENTATIVE EXPERIENCE

Project Director for numerous projects involving investigation and remediation of petroleum impacted soil and groundwater. Directed projects involving a variety of investigation methods for rapidly assessing the extent of impact from petroleum contamination. Projects involved field investigation, hydrogeologic modeling, and assessment of ecological and human health risks. Conducted the investigation of a large oil refinery in Hawaii. Prepared an Integrated Contingency Plan for a facility storing over one million gallons of oil. Conducted a assessment of crisis preparedness, and developed a crisis management plan for a major U.S. company.

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- Project Director and Project Manager for civil engineering projects including the design and
 installation of septic systems and leachfields at active service station sites, design and
 installation of a 6.5 acre engineered composite cap on a hazardous waste landfill, and design
 and installation of piping and containment systems for above-ground petroleum storage tanks
 and piping systems.
- Project Manager for multiphase investigation, remediation, and closure of CERCLA/RCRA regulated former steel manufacturing facility in Oahu. The project involved characterization of metals in groundwater, soils, and sediments. Project phases included developing work plans for a RCRA Facility Investigation (RFI), and voluntary interim measures for facility decommissioning and soil removal, treatment, and disposal. Remediation work included facility decommissioning, dredging of affected sediment, and closure of a waste pile area. The project required extensive negotiation with U.S. EPA Region IX and the Hawaii Department of Health.
- Prepared remedial investigation/feasibility study (RI/FS) report for CERCLA- nominated site, Hawaii. The evaluation required developing remedial designs and cost estimates for petroleum, chlorinated solvent, and metals-impacted soil and groundwater.
- Managed design, construction, and operation of state-of-the-art, \$1.2 million industrial wastewater treatment system for effluent from electronics industry specialty plating facility. Treatment processes included alkaline destruction of cyanide, hexavalent chrome reduction, heavy metals precipitation, and acid/base neutralization. The design featured advanced monitoring and control instrumentation, and secondary containment of all piping and treatment tanks. The plant was awarded the 1988 California Water Pollution Control Federation annual design excellence award.
- Managed three-month industrial wastewater treatment feasibility study for oily wastewater at
 a refinery in Hawaii. The project included design and operation of bench-scale unit
 processes, including an oil/water separator, an induced air flotation unit, and an activated
 sludge system. This project was conducted in the field under very difficult logistical and
 environmental conditions.
- Conducted hazardous waste characterization and disposal study for lead-based coating on a
 fuel storage tank. The project included field sampling, analysis of potential worker exposure,
 and recommendations to minimize potential exposure and the amount of hazardous waste
 generated by coating removal.
- Developed hazardous waste minimization and chlorofluorocarbon (CFC) reduction programs in manufacturing, cutting hazardous waste by 25 percent and reducing CFC emissions by 90 percent.
- Responsible for the startup and successful modification of a 20-million-gallon per day manganese-zeolite water treatment plant in Indiana.

PUBLICATIONS AND PRESENTATIONS

- Hebert, Jean A., and Morrell, Jeffrey C., 1998. Reducing the Cost of Subsurface Environmental Investigations: Use of an Electromagnetic Survey to Delineate a Hazardous Waste Landfill in Hawaii: Proceedings of the Water Environment Federation Technical Conference and Exhibition, Singapore, March 7-11, v. 1, Part III, p. 531-537.
- 1998. Storm Water Compliance Program for Industrial Facilities. Presented at The Estate of James Campbell Seminar for Companies in the Campbell Industrial Park. Kapolei, Hawaii.
- 1996. Expedited Investigation and Remediation. Presented at the 10th Biennial Seminar on International Environmental Law. Honolulu, Hawaii.
- 1993. Underground Storage Tank Program in Hawaii. Presented at the McCutchen Doyle Brown and Enersen Environmental Law Seminar, Honolulu, Hawaii.
- 1993. Environmental Site Assessments; Introduction to the ASTM Site Assessment Standard. Presented at a Honolulu Seminar sponsored by Levine Fricke and the Hawaii Department of Health.

REGISTRATIONS

Professional Civil Engineer: California, No. 042637

Professional Civil Engineer: Hawaii, No. 8426

PROFESSIONAL HISTORY

LFR Levine Fricke, Operations Manager and Principal Environmental Engineer, 1992-present Kennedy/Jenks Consultants, Industrial Services Group Manager, 1990-1991 Hewlett-Packard Company, Manufacturing Engineering Manager, 1983-1990 Aluminum Company of America, Project Engineer, 1981-1982